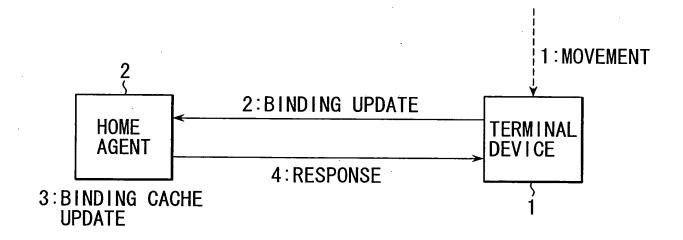
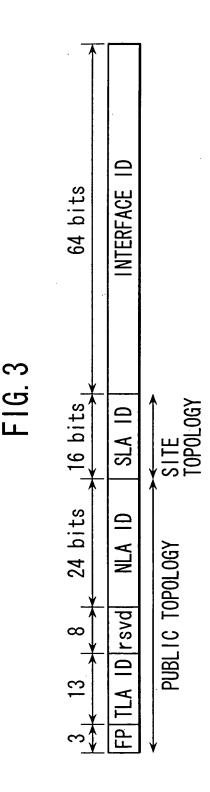
FIG. 1



F16. 2

VERSION TRAFFIC CLASS FLOW LABEL	PAYLOAD LENGTH NEXT HEADER HOP LIMIT		SOURCE ADDRESS			- DESTINATION ADDRESS		EXTENSION HEADER (OPTIONAL)
----------------------------------	--------------------------------------	--	----------------	--	--	-----------------------	--	-----------------------------



SOURCE: TERMINAL DEVICE (C/O) ADDRESS DESTINATION: HOME AGENT ADDRESS

<DESTINATION OPTIONS HEADER>
HOME ADDRESS OF TERMINAL DEVICE

<DESTINATION OPTIONS HEADER > BINDING UPDATE

<AUTHENTICATION HEADER>

IPv6 HEADER

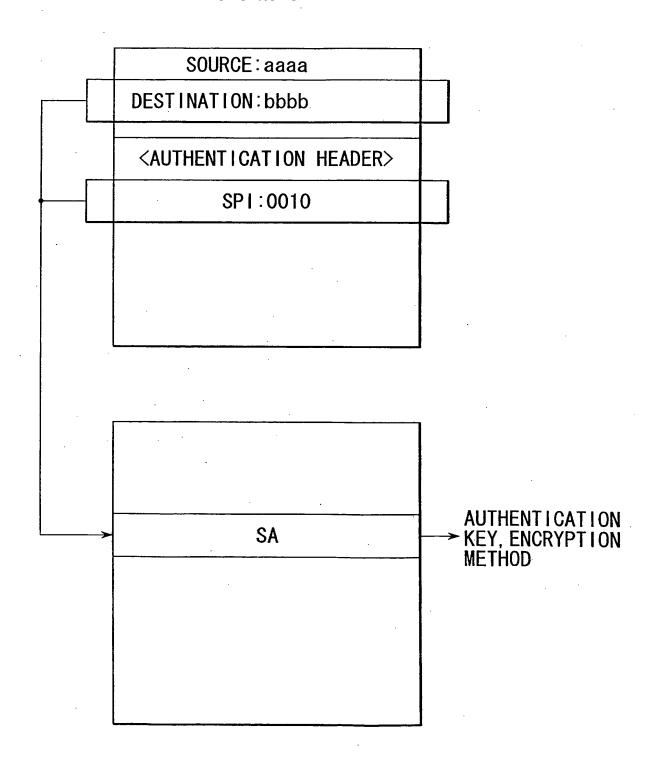
EXTENSION HEADER

F16.5

| bytes

JEXT HEADER PAYLOAD LENGTH RESERVED	SECURITY PARAMETERS INDEX(SPI)	SEQUENCE NUMBER	AUTHENTICATION DATA (VARIABLE)
NEXT HEADE			

FIG. 6



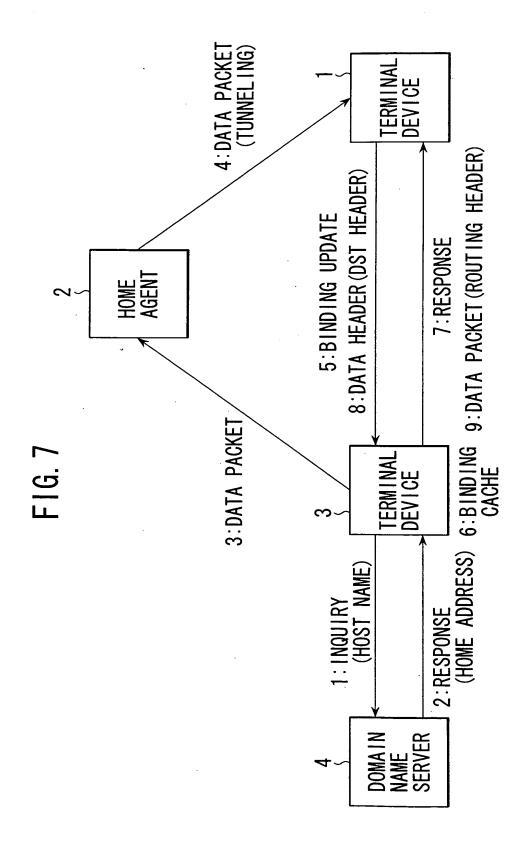


FIG. 8

HOST NAME	HOME ADDRESS			
aaaa	XXXX			
bbbb	YYYY			
CCCC	ZZZZ			
	· 			

FIG. 9

SOURCE: TERMINAL DEVICE 3	ADDRESS	
DESTINATION: HOME ADDRESS	OF TERMINAL DEVICE	1

SOURCE: ADDRESS OF HOME AGENT 2

DESTINATION: TERMINAL DEVICE 1 (C/O) ADDRESS

SOURCE: TERMINAL DEVICE 3 ADDRESS

DESTINATION: HOME ADDRESS OF TERMINAL DEVICE 1

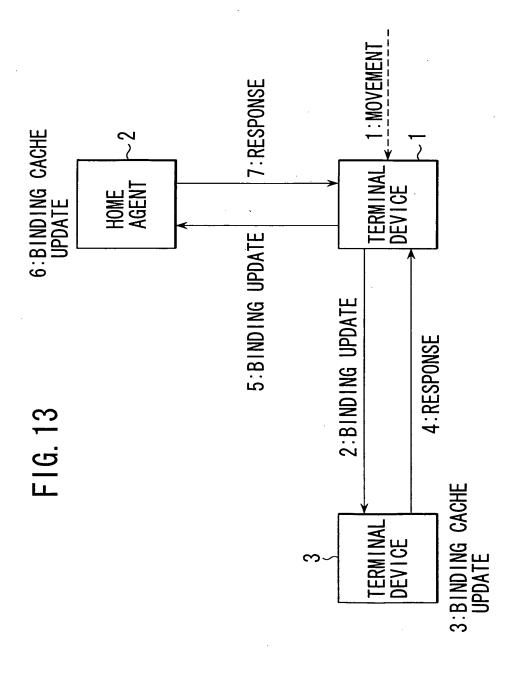
DATA

FIG. 11

SOURCE: TERMINAL DEVICE 1 (C/O) ADDRESS DESTINATION: TERMINAL DEVICE 3 ADDRESS

< DESTINATION OPTIONS HEADER> HOME ADDRESS OF TERMINAL DEVICE 1

SOURCE: TERMINAL DEVICE 3 ADDRESS
DESTINATION: TERMINAL DEVICE 1 (C/O) ADDRESS



SOURCE: TERMINAL DEVICE 1 (C/O) ADDRESS DESTINATION: TERMINAL DEVICE 3 ADDRESS
<pre></pre>
<pre>< DESTINATION OPTIONS HEADER > BINDING UPDATE</pre>
<authentication header=""></authentication>

SOURCE: TERMINAL DEVICE 1 (C/O) ADDRESS DESTINATION: HOME AGENT ADDRESS					
<pre></pre>					
<pre><destination header="" options=""> BINDING UPDATE</destination></pre>					
<authentication header=""></authentication>					

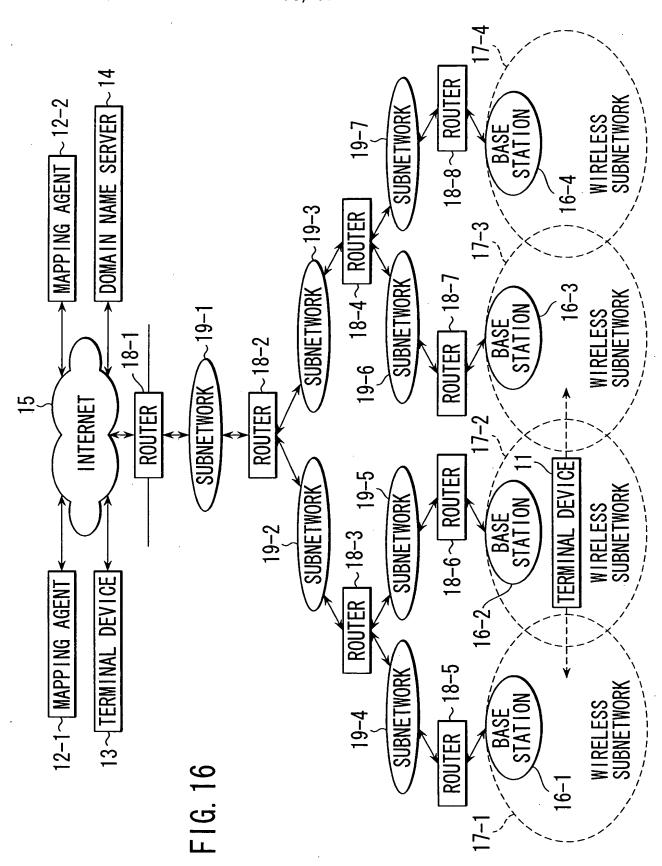


FIG. 17

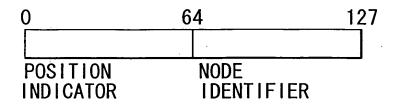


FIG. 18

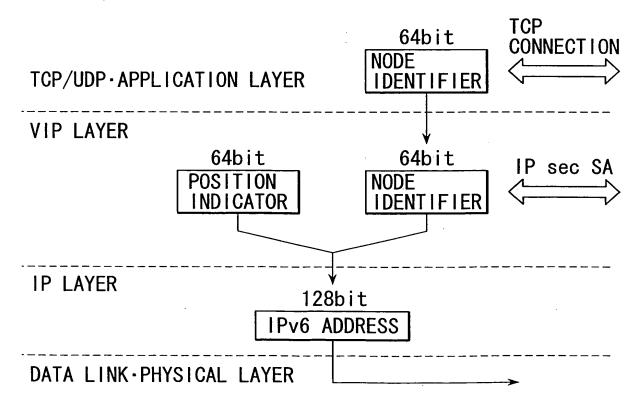


FIG. 19

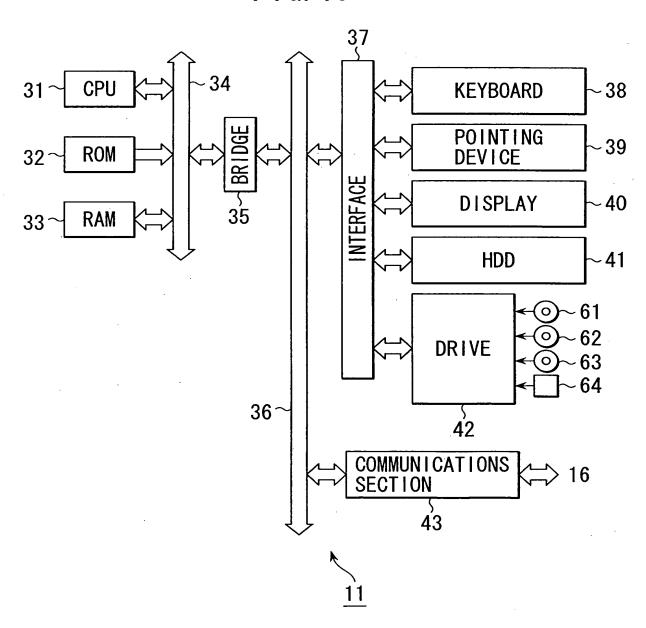
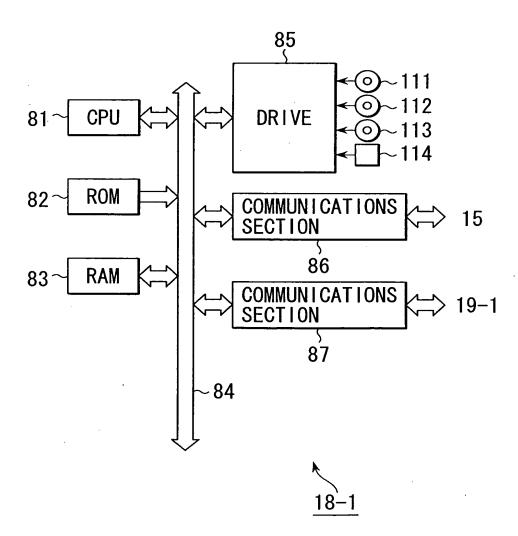


FIG. 20



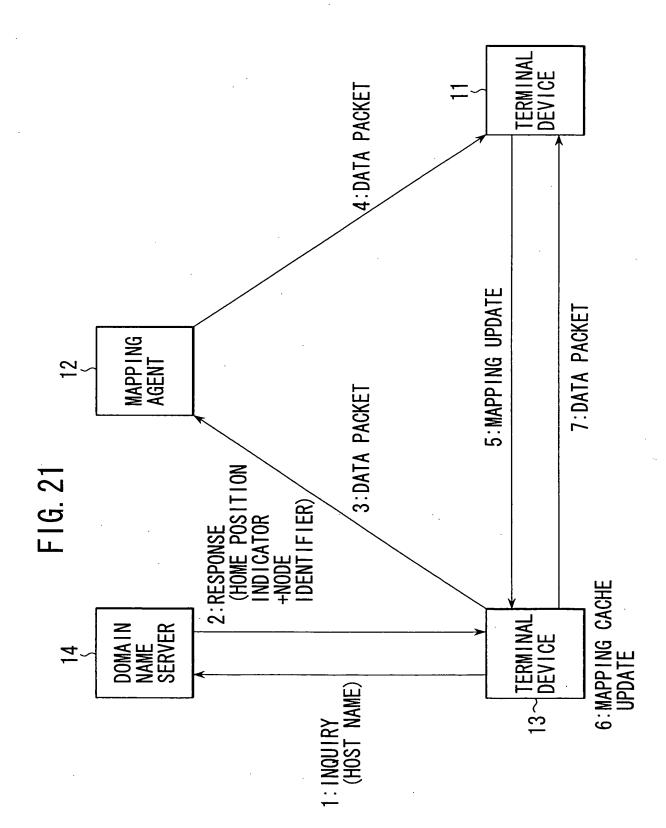


FIG. 22

HOST NAME	NODE IDENTIFIER	HOME POSITION INDICATOR
aaaa	αααα	alalalal
bbbb	ββββ	b1 b1 b1 b1
cccc	7777	C1 C1 C1 C1

FIG. 23

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: HOME POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: CURRENT POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

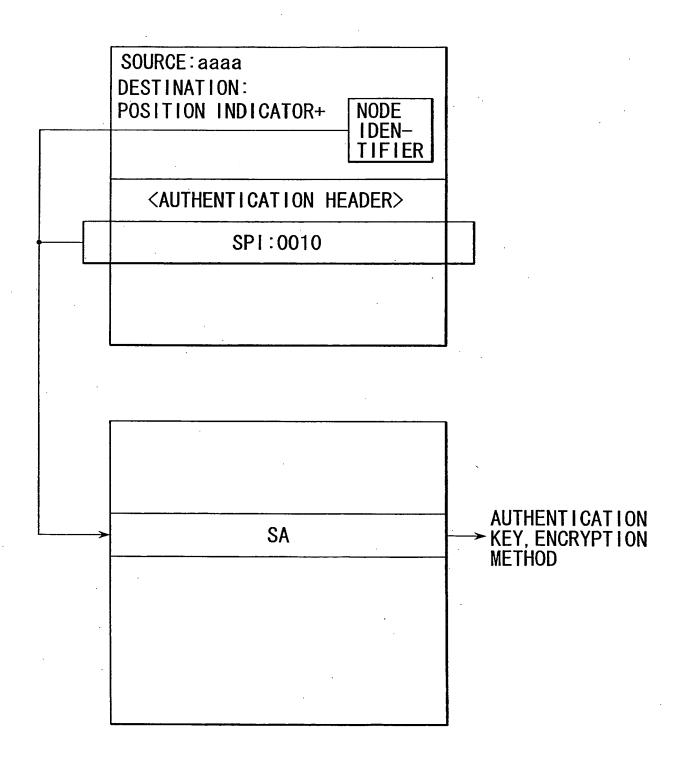
DATA

FIG. 25

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: CURRENT POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

<AUTHENTICATION HEADER>

FIG. 26



START OF COMMUNICATION PROCESSING

TERMINAL DEVICE 13 INDICATES THE HOST NAME OF TERMINAL DEVICE 11. AND REQUESTS THE HOME POSITION INDICATOR AND NODE ~S11 IDENTIFIER OF TERMINAL DEVICE 11 FROM THE NAME SERVER THE NAME SERVER TRANSMITS THE HOME POSITION INDICATOR AND -S12 NODE IDENTIFIER OF TERMINAL DEVICE 11 TO THE TERMIANL DEVICE 13 THE TERMINAL DEVICE 13 LINKS THE RECEIVE HOME POSITION INDI--S13 CATOR WITH THE NODE IDENTIFIER AND GENERATES AN LIN6 ADDRESS THE TERMINAL DEVICE 13 TRANSMITS THE PACKET TO THE MAPPING -S14 AGENT BASED ON THE GENERATED LIN6 ADDRESS THE MAPPING AGENT REWRITES THE POSITION INDICATOR OF THE TRANSMIT DESTINATION ADDRESS OF THE RECEIVED PACKET INTO THE ~S15 CURRENT POSITION INDICATOR AND SENDS IT THE TERMINAL DEVICE 11 RECEIVES THE PACKET THAT WAS SENT -S16 THE TERMINAL DEVICE 11 TRANSMITS TO TERMINAL DEVICE 13, THE MAPPING UPDATE PACKET SET WITH THE CURRENT POSITION -S17 INDICATOR THE TERMINAL DEVICE 13 RECEIVES THE MAPPING UPDATE PACKET **S19** IS THE NO AUTHENTICATION DATA OF THE MAPPING UPDATE PACKET CORRECT **↓YES** THE TERMINAL DEVICE 13 REGISTERS THE CURRENT POSITION -S20 INDICATOR OF TERMINAL DEVICE 11 IN THE MAPPING CACHE THE TERMINAL DEVICE 13 TRANSMITS THE PACKET TO THE TERMINAL ~S21 DEVICE 11 BASED ON THE CURRENT POSITION INDICATOR

END

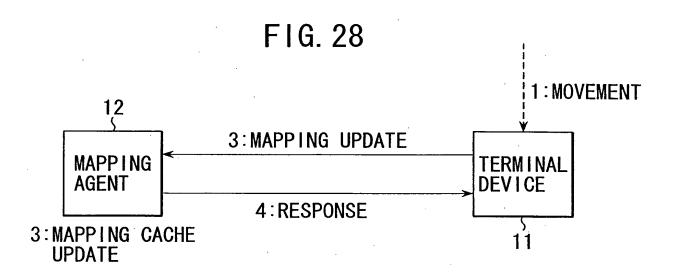
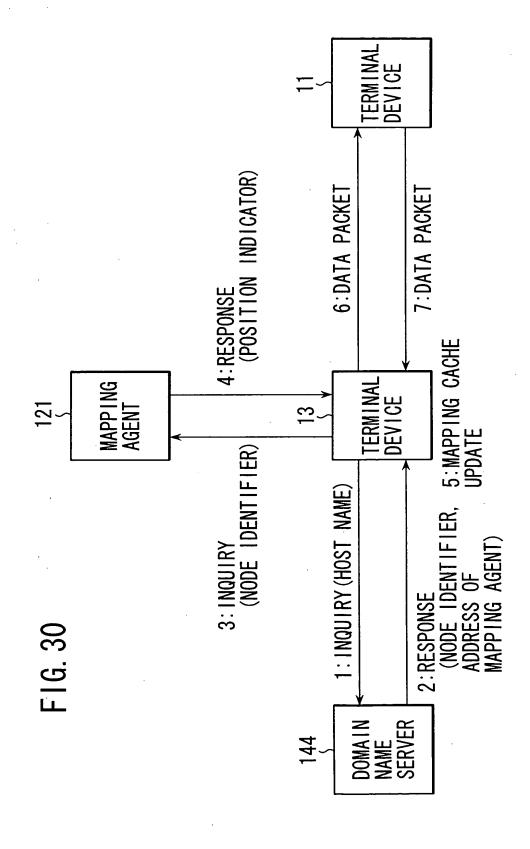


FIG. 29

SOURCE:CURRENT POSITION INDICATOR+NODE IDENTIFIER OF TERMINAL DEVICE 11 DESTINATION:MAPPING AGENT ADDRESS	-
<authentication header=""></authentication>	,



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	NUDE IDENIIFIEK MAPPING AGENI AUDKESS	iiii, jjjj, kkkk	шшшш	nnnn, oooo	
L C C	NUDE IDENIIFIEK	αααα	BBBB	7777	
L	HUSI NAME	aaaa	qqqq	2222	

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FIG. 32

NODE IDENTIFIER	CURRENT POSITION INDICATOR
αααα	e1 e1 e1 e1

FIG. 33

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

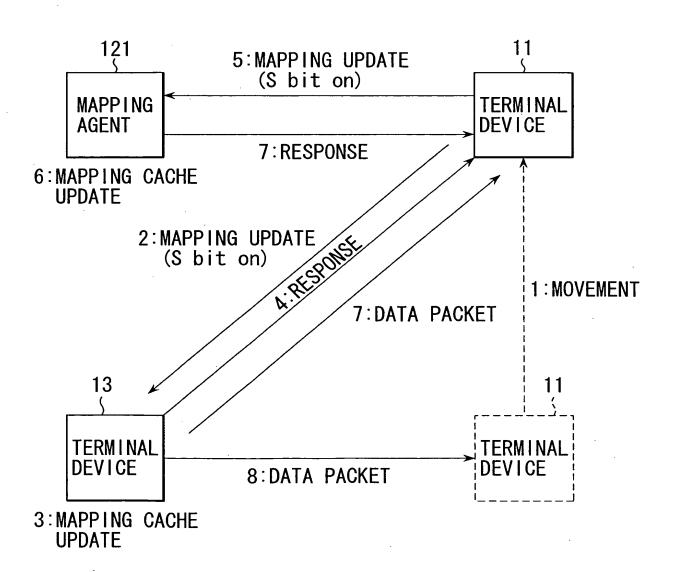
DATA

FIG. 34

SOURCE POSITION INDICATOR+NODE IDENTIFIER OF TERMINAL DEVICE 11

DESTINATION: TERMINAL DEVICE 13 ADDRESS

FIG. 35



SOURCE: NEW POSITION INDICATOR+NODE IDENTIFIER
OF TERMINAL DEVICE 11
DESTINATION: TERMINAL DEVICE 13 ADDRESS

AUTHENTICATION HEADER>
NEW POSITION INDICATOR
OLD POSITION INDICATOR
CURRENT TIME
EFFECTIVE TIME

FIG. 37

SOURCE: NEW POSITION INDICATOR+NODE IDENTIFIER
OF TERMINAL DEVICE 11
DESTINATION: MAPPING AGENT ADDRESS

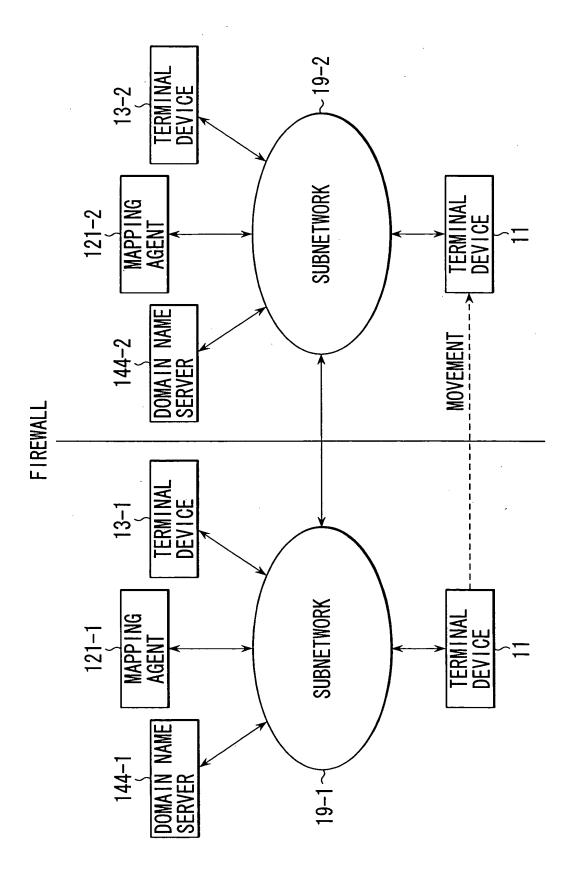
AUTHENTICATION HEADER>
NEW POSITION INDICATOR
OLD POSITION INDICATOR
CURRENT TIME
EFFECTIVE TIME

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: NEW POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

DATA

FIG. 39

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: OLD POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11



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F16 41

EFFECT I VE TIME	20	30	09	
TIME	10:14	10:31	11:03	
OLD POSITION INDICATOR	h1h1h1h1	11111111	ıi ii ii i	
NEW POSITION INDICATOR	e1 e1 e1 e1	f1 f1 f1	g1 g1 g1	
NODE IDENTIFIER	αααα	BBBB	7777	

START OF PROCESSING TO NOTIFY OF CURRENT POSITION INDICATOR TERMINAL DEVICE ACQUIRES POSITION INDICATOR FOR CURRENT SUBNETWORK TERMINAL DEVICE SELECTS SPECIFIED MAPPING AGENT ~ S42 TERMINAL DEVICE GENERATES MAPPING UPDATE PACKET - S43 WITH AUTHENTICATION HEADER TERMINAL DEVICE TRANSMITS MAPPING UPDATE PACKET ~ S44 TO MAPPING AGENT MAPPING AGENT RECEIVES MAPPING UPDATE PACKET **S46** IS N₀ AUTHENTICATION DATA CORRECT **VES** MAPPING AGENT REGISTERS CURRENT POSITION - S47 INDICATOR IN MAPPING CACHE MAPPING AGENT TRANSMITS THE ACKNOWLEDGE - S48 RESPONSE PACKET TO TERMINAL DEVICE TERMINAL DEVICE RECEIVES THE ACKNOWLEDGE **S49** RESPONSE PACKET **S50** WAS NO CURRENT POSITION INDICATOR SENT TO ALL MAPPING AGENTS YES **END**

START OF COMMUNICATION PROCESSING TERMINAL DEVICE 13 INDICATES THE HOST NAME OF TERMINAL DEVICE 11, AND REQUESTS THE NODE IDENTIFIER ~S81 AND MAPPING AGENT ADDRESS OF TERMINAL DEVICE 11 FROM THE NAME SERVER THE NAME SERVER TRANSMITS THE NODE IDENTIFIER AND MAPPING AGENT ADDRESS OF TERMINAL DEVICE 11 TO THE ~S82 TERMINAL DEVICE 13 THE TERMINAL DEVICE 13 SELECTS THE MAPPING AGENT **S83 ADDRESS** BASED ON THE SELECTED ADDRESS. THE TERMINAL DEVICE 13 REQUESTS THE CURRENT POSITION INDICATOR CORRE-- S84 SPONDING TO TERMINAL DEVICE 11 FROM THE MAPPING **AGENT** THE MAPPING AGENT TRANSMITS TO TERMINAL DEVICE 13. THE CURRENT POSITION INDICATOR CORRESPONDING TO - S85 TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 REGISTERS IN THE MAPPING - S86 CACHE. THE CURRENT POSITION INDICATOR CORRESPONDING TO TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 CONFIGURES THE ADDRESS BASED ON THE NODE IDENTIFIER AND CURRENT POSITION ~S87 INDICATOR CORRESPONDING TO TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 TRANSMITS THE PACKET TO TERMINAL DEVICE 11 BASED ON THE ADDRESS THAT WAS ~S88 CONF I GURED

THE TERMINAL DEVICE 11 TRANSMITS THE PACKET TO THE TERMINAL DEVICE 13

- S89

END

	·
START OF PROCESSING FOR MOVEMENT	
TERMINAL DEVICE 11 ACQUIRES THE POSITION INDICATOR FOR THE CONNECTED SUBNETWORK	~S101
TERMINAL DEVICE 11 TRANSMITS TO TERMINAL DEVICE 13, A NEW POSITION INDICATOR AND OLD POSITION INDICATOR IN THE MAPPING UPDATE PACKET SET WITH THE S BIT	~\$102
	~S103
MAPPING CACHE	
TERMINAL DEVICE 13 TRANSMITS THE ACKNOWLEDGE RESPONSE PACKET TO TERMINAL DEVICE 11	~\$104
TERMINAL DEVICE 44 TRANSMITS TO THE MARRIAGE	
TERMINAL DEVICE 11 TRANSMITS TO THE MAPPING AGENT, A NEW POSITION INDICATOR AND OLD POSITION INDICATOR IN THE MAPPING UPDATE PACKET SET WITH THE S BIT	~S105
THE MAPPING AGENT REGISTERS THE OLD POSITION INDICATOR AND NEW POSITION INDICATOR IN THE MAPPING CACHE	~\$106
THE MAPPING AGENT TRANSMITS THE ACKNOWLEDGE RESPONSE PACKET TO THE TERMINAL DEVICE 11	~S107
THE TERMINAL RELIGION AS	
THE TERMINAL DEVICE 13 ALONG WITH TRANSMITTING A PACKET TO TERMINAL DEVICE 11, BASED ON THE NEW POSITION INDICATOR, ALSO TRANSMITS A PACKET BASED ON THE OLD POSITION INDICATOR	~S108
(<u>END</u>)	

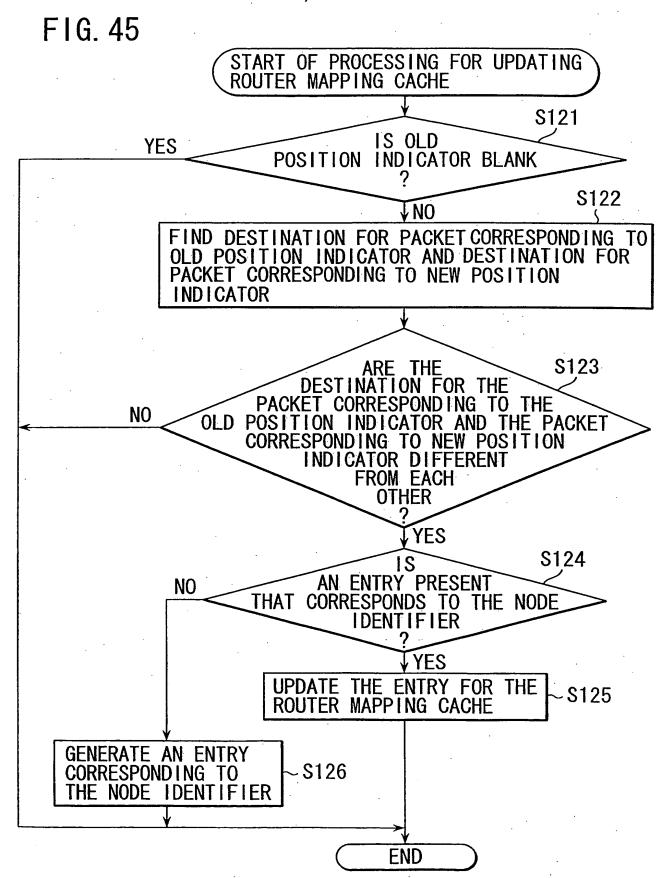
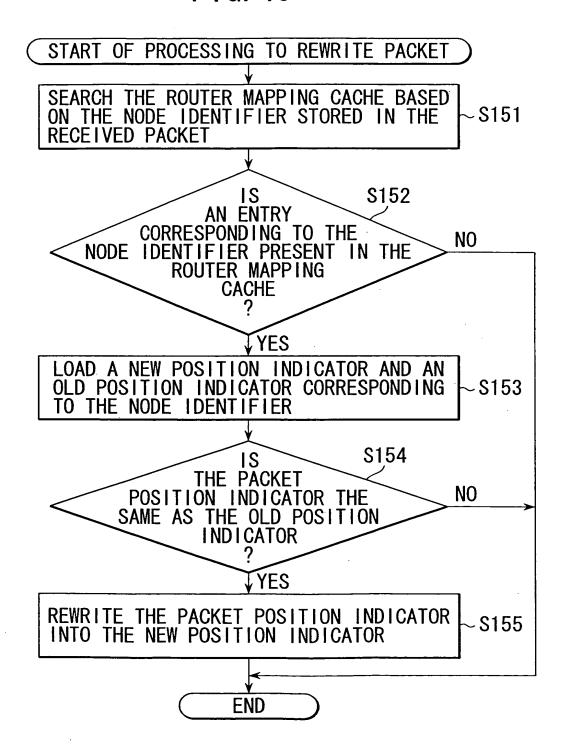
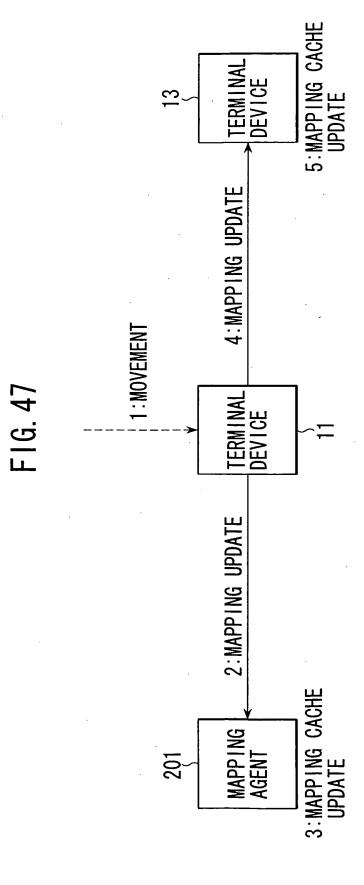
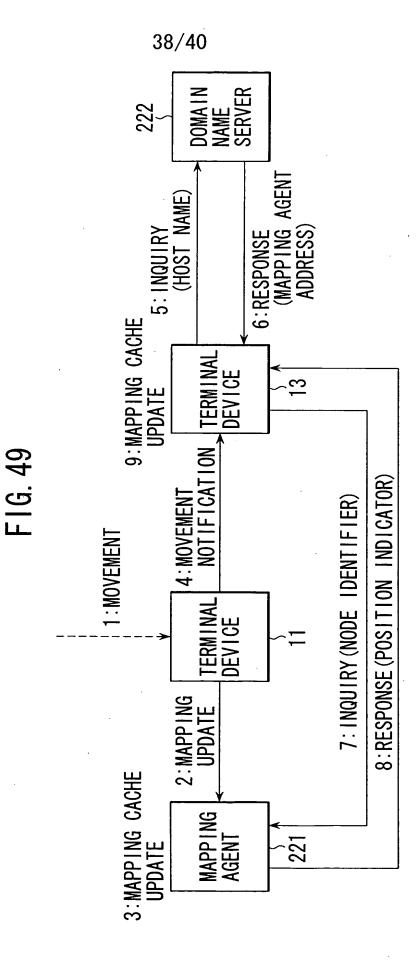


FIG. 46





START OF PROCESSING TO UPDATE MAPPING CACHE
TERMINAL DEVICE 11 ACQUIRES POSITION INDICATOR FOR CURRENT SUBNETWORK
<u> </u>
TERMINAL DEVICE 11 GENERATES MAPPING UPDATE PACKET ~ \$202
<u> </u>
TERMINAL DEVICE 11 TRANSMITS THE MAPPING UPDATE PACKET TO MAPPING AGENT
THE MAPPING AGENT RECEIVES THE MAPPING UPDATE PACKET
\$205
IS NO
AUTHENTICATION DATA CORRECT
?
↓YES
THE MADDING ACENT DECLETEDS SUPPRINT DOCUTION
INDICATOR IN MAPPING CACHE
T=====================================
TERMINAL DEVICE 11 GENERATES MAPPING UPDATE PACKET ~ \$207
TERMINAL DEVICE 11 TRANSMITS THE MAPPING UPDATE PACKET TO TERMINAL DEVICE 13
TERMINAL DEVICE 13 RECEIVES THE MAPPING UPDATE \$209
\$210
IS NO
AUTHENTICATION DATA CORRECT
?
↓ YES
TERMINAL DEVICE 13 REGISTERS CURRENT POSITION S211
TND.
(END)



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START OF PROCESSING TO UPDATE MAPPING CACHE
TERMINAL DEVICE 11 ACQUIRES POSITION INDICATOR FOR CURRENT SUBNETWORK ~\$231
TERMINAL DEVICE 11 GENERATES MAPPING UPDATE PACKET ~\$232
TERMINAL DEVICE 11 TRANSMITS THE MAPPING UPDATE PACKET TO MAPPING AGENT ~\$233
THE MAPPING AGENT RECEIVES THE MAPPING UPDATE PACKET \$\sigma \S234\$
<u> </u>
AUTHENTICATION DATA CORRECT NO
?
THE MAPPING AGENT REGISTERS CURRENT POSITION INDICATOR IN MAPPING CACHE ~\$236

TERMINAL DEVICE 11 GENERATES MOVEMENT NOTIFICATION PACKET ~\$237
TERMINAL DEVICE 11 TRANSMITS THE MOVEMENT NOTIFICATION PACKET TO TERMINAL DEVICE 13
TERMINAL DEVICE 13 RECEIVES THE MOVEMENT NOTIFICATION PACKET ~\$239
Y .
TERMINAL DEVICE 13 INDICATES THE HOST NAME OR NODE IDENTIFIER OF TERMINAL DEVICE 11, AND REQUESTS THE MAPPING AGENT ADDRESS FROM THE NAME SERVER
V
THE NAME SERVER RECEIVES THE HOST NAME OR NODE IDENTIFIER OF TERMINAL DEVICE 11 \sim S241
V
THE NEME SERVER TRANSMITS THE MAPPING AGENT ADDRESS ~\$242
Ψ
TERMINAL DEVICE 13 RECEIVES THE MAPPING AGENT ADDRESS FROM THE NAME SERVER
TERMINAL DEVICE 13 INDICATES THE NODE IDENTIFIER OF TERMINAL DEVICE 11. AND REQUESTS THE CURRENT POSITION INDICATOR FROM THE MAPPING AGENT
THE MAPPING AGENT RECEIVES THE NODE IDENTIFIER ~\$245
THE MAPPING AGENT TRANSMITS THE CURRENT POSITION INDICATOR TO TERMINAL \$246
DEVICE 13
TEDMINAL DEVICE 12 DECEIVES THE CHODENT DOCUTION INDICATOR COAT
TERMINAL DEVICE 13 RECEIVES THE CURRENT POSITION INDICATOR ~\$247
TERMINAL DEVICE 13 REGISTERS THE CURRENT POSITION INDICATOR IN MAPPING ~S248
(END)